

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/926,137 | 09/07/2001 | Satoshi Makino | 106145-00022 | 7787 |

7590 04/28/2003
Arent Fox Kintner Plotkin & Kahn
1050 Connecticut Avenue NW Suite 600
Washington, DC 20036-5339

EXAMINER

FISCHER, JUSTIN R

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

1733

DATE MAILED: 04/28/2003

6

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/926,137

Applicant(s)

MAKINO, SATOSHI

Examiner

Justin R Fischer

Art Unit

1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 September 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5 is/are pending in the application.
- 4a) Of the above claim(s) 4 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☒ Claim(s) 3 and 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5. 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. This application contains claims directed to the following patentably distinct species of the claimed invention: a tire assembly having an “innerliner layer” and a “most inner layer” that form an “adhesion part” and a non-adhesion part”, wherein a pneumatic layer is disposed between the “innerliner layer” and the “most inner layer” (claim 4) and a tubeless tire assembly having an “innerliner layer” and a “most inner layer” that form an “adhesion part” and a non-adhesion part”, wherein the “most inner layer” contains openings (claim 5).

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 1-3 are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Art Unit: 1733

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

2. During a telephone conversation with Mr. Charles Marmelstein on April 2, 2003 a provisional election was made with traverse to prosecute the invention of a tubeless tire assembly having an "innerliner layer" and a "most inner layer" that form an "adhesion part" and a non-adhesion part", wherein the "most inner layer" contains openings, claims 1-3 and 5. Affirmation of this election must be made by applicant in replying to this Office action. Claim 4 is withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

3. Rejoinder will be considered upon the indication of allowable subject matter on the basis thereof.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The following language is included in claim 2: said adhesion part includes an adhesion part, in which said non adhesion part stuck to said inner liner

Art Unit: 1733

layer is formed in a line or a dot. This language does not provide a clear and concise understanding of the claimed invention. It is unclear if applicant intended the claim to require that the adhesion part includes a non-adhesion part (as opposed to an adhesion part), in which case the non-adhesion part would be discontinuous between the primary adhesion parts (i.e. non-adhesion part is actually partially adhered). Alternatively, it is unclear if applicant intended the claim to require that the primary adhesion parts are discontinuous and are bonded together in a line or a dot. Applicant is asked to clarify the scope of the claim without the introduction of new matter.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Kawaguchi (US 4,966,213). Kawaguchi is directed to a tubeless tire construction in which two rubber composition layers (inner liner layer and “most inner layer”) are arranged radially inside the carcass structure. The reference further states that a sealing material or sheet is disposed between said two rubber composition layers and contains holes or slits there within, such that the respective rubber composition layers are discontinuously bonded over the extent of the respective layers (Abstract and Column 3, Lines 1-5). In this instance, the regions where the rubber composition layers are bonded represent the “adhesion part” and the regions where the rubber

Art Unit: 1733

compositions layers are not contacting (due to presence of sealing sheet/material) represent the “non-adhesion part”. Also, the innermost rubber composition layer of Kawaguchi is being viewed as the “most inner layer” and the rubber composition layer directly adjacent the carcass structure is being viewed as the “inner liner layer”. Lastly, it should be noted that the construction of Kawaguchi in which the respective rubber composition layers form an “adhesion part” and a “non-adhesion part” allows the respective rubber compositions to function independently in the regions where they are not bonded.

With specific respect to claim 2, Kawaguchi teaches that the bonding portions can be in the shape of holes (analogous to dots), as depicted in Figure 1, and further suggests that the bonding portion can have any shape (Column 3, Lines 1-25).

8. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by either one of Harrington (US 3,930,528). As best depicted in Figures 6 and 7, Harrington discloses a tubeless tire construction in which a mold release sheet is placed between an innerliner (“inner liner layer”) and an additional layer (“most inner layer”), such that said sheet does not extend over the entire extent of the respective rubber layers (Column 3, Lines 10-65). Thus, the edges of the respective layers are bonded in the region where there is no anti-adhesive sheet and thus form an “adhesion part”. In the region where the anti-adhesive sheet or mold release sheet is present, the layers are not bonded and thus form a “non-adhesion part”. It should be noted that the construction Harrington in which the respective layers form an “adhesion part” and a “non-adhesion part” allows

Art Unit: 1733

the respective layers to function independently in the regions where they are not bonded.

9. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Yamagiwa (WO 99/47345). As best depicted in Figure 6, Yamagiwa discloses a tubeless tire construction in which a mold release sheet 9 is placed between an innerliner 2₁ ("inner liner layer") and an additional layer 6 ("most inner layer"), such that said sheet does not extend over the entire extent of the respective layers (Column 3, Lines 10-65). Thus, the edges of the respective layers are bonded in the region where there is no anti-adhesive sheet and thus form an "adhesion part". In the region where the anti-adhesive sheet or mold release sheet is present, the layers are not bonded and thus form a "non-adhesion part". It should be noted that the construction of Yamagiwa in which the respective layers form an "adhesion part" and a "non-adhesion part" allows the respective layers to function independently in the regions where they are not bonded.

Allowable Subject Matter

10. Claims 3 and 5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Rawdon (US 1,279,001) and Case (US 1,298,661) are directed to tire constructions in which a layer is disposed within the tire cavity and adjacent the carcass assembly, such that said layer is not vulcanized with said carcass and thus has

Art Unit: 1733

the ability to function independently and restrict the penetration of a nail or additional object, as best depicted in Figures 1 and 2, respectively. Song (GB 2,240,953), Bridgestone (JP 57-44503), and Tanaka (JP 51-132509) all suggest the manufacture of a tubeless tire construction in which the innerliner forms "adhesion parts" and "non-adhesion parts"- the references fail to suggest a second rubber layer that is disposed inward of the innerliner, wherein the second rubber layer forms "adhesion parts" and "non-adhesion parts" with the innerliner.


12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Justin R Fischer** whose telephone number is **(703) 605-4397**. The examiner can normally be reached on M-F (7:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Ball can be reached on (703) 308-2058. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.


Justin Fischer

April 23, 2003


Michael W. Ball
Supervisory Patent Examiner
Technology Center 1700